

EXHIBIT A

Protein Translation of SEQ ID NO:3

**Protein sequence**

Frame 1

MSLLTEVETYVLSIIPSGPLKAEIAQRLEDVFAKNTDLEALMEWLKTRP 50  
ILSPLTKGILGFVFTLTVPSEGLQRRRFVQNALNGNGDFNNMDRAVKLY 100  
KKLKREMTFHGAKEVALSYSTGALASCMGLIYNRMGTVTTEVALGLVCAT 150  
CEQIADAQHRSRQMAATTNPLIRHENRMVLASTTAKAMEQAGSSEQAA 200  
EAMEVASQARQMVQAMRTIGTHPSSSAGLKDDLIENLQAYQKRMGVQMQR 250  
FK\*

Total length= 253

**Map**

1 AUGAGUCUUCUAACCGAGGUCGAAACGUACGUUCUCUCUAUCAUCCCAUCAGGCCCCUC 60  
M S L L T E V E T Y V L S I I P S G P L  
\* V F \* P R S K R T F S L S S H Q A P S  
E S S N R G R N V R S L Y H P I R P P Q

61 AAAGCCGAGUACGCGCAGAGACUAGGAGUUGUUUUGCAGGGAAGAACAGAUUUGAG 120  
K A E I A Q R L E D V F A G K N T D L E  
K P R S R D L R M F L Q G R T Q I L R  
S R D R A E T \* G C F C R E E H R S \* G

121 GCUCUCAUGGAAUGGCUAAAGACAAAGACCAUCCUGACACCUCUGACUAGGGGAUUUA 180  
A L M E W L K T R P I L S P L T K G I L  
L S W N G \* R Q D Q S C H L \* L R G F \*  
S H G M A K D K T N P V T S D \* G D F R

181 GGGUUGUGUUCACGCUACCCGUGCCAGUGAGCGAGGACUGCAGCGUAGACGAUUUGUC 240  
G F V F T L T V P S E R G L Q R R R F V  
G L C S P C P V S E D C S V D D L S  
V C V H A H R A Q \* A R T A A \* T I C P

241 CAAAUGCCCUAAAUGGGAAUGGAGACCCAAACAACUAGGACAGGGCAGUUAACUAUAC 300  
Q N A L N G N G D P N N M D R A V K L Y  
K M P \* M G M E T Q T T W T G Q L N Y T  
K C P K W E W R P K Q H G Q G S \* T I Q

301 AAGAAGCUGAAGAGGGAAUGACAUUCCAUGGAGCAAAGGAAGUUGCAGUCAGUUACUCA 360  
K K L K R E M T F H G A K E V A L S Y S  
R S \* R G K \* H S M E Q R K L H S V T Q  
E A E E G N D I P W S K G S C T I Q L L N

361 ACUGGUGCGCUUGCCAGUUGCAUGGGUUCUAUAUACACCGGAGGGAACAGUGACCACA 420  
T G A L A S C M G L I Y N R M G T V T T  
L V R L P V A W V S Y T T G W E Q \* P Q  
W C A C Q L H G S H I Q P D G N S D H R

421 GAAGUGGCUUGGCCUAGUAUGUGCCACUUGUGAACAGAUUGCUGAUGCCCAACUUCG 480  
E V A L G L V C A T C E Q I A D A Q H R  
K W L L A \* Y V P L V N R L L M P N I G  
S G S W P S M C H L \* T D C \* C P T S V

481 UCCACAGGCAGAUUGGCGACUACCCACCCACUAAUCAGGCAUGAGAACAGAUUGGUA 540  
S H R Q M A T T T N P L I R H E N R M V  
P T G R W R L P P T H \* S G M R T E N Y  
P Q A D G D Y H Q P T N Q A \* E Q N G T

541 CUAGCCAGCAGUACGCGCUAAGGCCAUGGAGCAGAUUGGUGGAUCAAGUGAGCAGGCAGCA 600  
L A S T T A K A M E C M A G S S E Q A A  
\* P A L R L R P W S R W L D Q V S R Q Q  
S Q H Y G \* G H G A D G W I K \* A G S R

601 GAAGCCAUUGAAGUGCGAAGUCAGGCUAGGCAAAUGGUGCAGGCUAGAGGCAAUUGGG 660  
E A M E V A S Q A R Q M V Q A M R T I G  
K P W K S Q V R L G K W C R L \* G Q L G  
S H G S R K S G \* A N G A G Y E D N W D

661 ACUCACCCUAGUUCAGUGCAGGUCUAAAGAUUGAUUUAUUGAAAUUUGCAGGCUUAC 720  
T H P S S A G L K D D L I E N L Q A Y  
L T L V P V Q V \* K M I L L K I C R L T  
S P \* F Q C R S K R \* S Y \* K F A G L P

721 CAGAAACGGAUGGAGUGCAAUGCAGAGAUUCAAGUGA 759  
Q K R M G V Q M O R F K \*  
R N G W E C K C R D S S  
E T D G S A N A E I Q V

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